

Comment Info: =====

General Comment: February 3, 2006

Public Information and Records
Integrity Branch (PIRIB) (7502C), Office
of Pesticide Programs (OPP),
Environmental Protection Agency, 1200
Pennsylvania Ave., NW.,
Washington, DC 20460-0001

Attn: Docket ID EPA-HQ-OPP-2005-0252

Dear Sir or Madam:

The California Strawberry Commission (Commission) is providing these comments on the January 5, 2006 Federal Register notice on the iodomethane risk assessment.

The Commission was established under California law and represents all the 600+ growers, shippers, and processors of strawberry fruit in California. California

produced 88% of the nation's strawberry fruit in 2005 with a farm-gate value of \$1.3 billion. Iodomethane is a highly promising alternative to methyl bromide for pre-plant soil fumigation in strawberry fruit production. Methyl bromide is being phased out by agreement with the Montreal Protocol. The registration of iodomethane with reasonable label restrictions is essential to our continued transition away from fumigation with methyl bromide.

Iodomethane is likely to be used by growers in the same manner as other currently registered fumigants. It will be used to control soil borne diseases like

Verticillium and Phytophthora wilt, weeds, insects and to improve the overall productivity of the crop in the absence of primary pathogens or pests. The strawberry industry has invested over \$10 million in grower derived funds since 1992 to support research on alternative fumigants like iodomethane. Over 40 percent of the strawberry acreage in California was fumigated with alternatives last

year. However, there remain significant barriers to the complete phase out of methyl bromide. These include a state mandated cap on the amount of the alternative fumigant 1,3-dichloropropene (telone) that can be used annually in individual townships, concerns about the long-term effectiveness of the alternatives, and transitional issues relating to the change from broadcast fumigation with methyl bromide to bed fumigation with alternatives. Iodomethane

should help our industry address many of these limitations and better enable us to continue our federally mandated phase out of methyl bromide.

The Commission is concerned about which HEC endpoints for acute inhalation toxicity that the United States Environmental Agency (EPA) will use for benchmarks in the risk assessment for iodomethane. We feel that the 4.0 ppm from fetal resorptions is a more appropriate HEC endpoint than the 2.9 ppm derived from nasal lesions observed in the rat study. The 2.9 ppm endpoint is too conservative since it was derived using the PBPK model which produces a HEC 20% lower than if derived by the default method. There was also only a 25% glutathione depletion at the NOEL and the EPA has agreed that sustained depletion of 50% or more is critical for toxicity. The nasal lesions observed were mild in severity, reversible and did not progress after repeated exposures of up to

104 weeks. Humans are probably less sensitive than rodents to nasal lesions from iodomethane because GSH depletion in iodomethane-exposed rats was primarily due to metabolism by GST-theta, which is significantly more active in rats than humans. EPA assumed that GST-theta levels are same for rats and humans.

The 4.0 ppm HEC benchmark for iodomethane developmental effects is also very conservative. The fetal resorptions developmental effect was likely due to excess iodide. The effects were seen in rabbits but not in the rat developmental study. Rabbits concentrate iodide in the fetus while rats and humans do not. Therefore

we feel that the EPA should use the 4.0 ppm and not the 2.9 ppm as the HEC benchmark for acute inhalation toxicity in calculating the risk mitigation measures for iodomethane.

The Commission is also concerned about the level of conservatism that the EPA will apply when they determine maximum buffer zones for the label. Buffer zones

in excess of 100 feet will create significant barriers to the practical and economical use of iodomethane. Current California regulations for the use of methyl bromide have already created significant challenges for growers wishing to fumigate for strawberry production. Any further increase in buffer zone restrictions without

reasonable mitigation options will likely slow or prevent the adoption of iodomethane as a replacement fumigant for methyl bromide in California strawberry production.

Please contact me at 831-724-1301 or dlegard@calstrawberry.org, if you have any questions or if I can provide additional information about the use of methyl bromide in the California strawberry fruit production.

Sincerely,

Dan Legard
Research Director
California Strawberry Commission